

Remarks

Claims 27 to 43 are in this application.

The description has been amended to more particularly conform with US practice.

Note is made of the request for section headings. However, there is no Statute or Rule that requires the use of section headings. In any event, the format suggested in 37 CFR 1.77 has been followed.

The claims have been revised in order to conform with US practice. According, each claim is believed to be in conformance with the provisions of 35 U.S.C. 112.

Note is made of the rejection of original claims 1 to 3 as being unpatentable over Sollesnes in view of Owens. In this respect, the Examiner alleges that Sollesnes discloses a plug with a film or sheet of material 44 inserted between different layers of the plug to obtain the required strength and toughness. Issue is taken in this respect.

Sollesnes in Fig. 4 illustrates a plug 40 of unitary construction that is provided with a pair of gaskets 44 (see also, page 4, lines 30 -36). Enclosed herewith are two photographs of a unitary gas plug by Sollesnes, one photograph showing a pair of annular grooves and the second photograph showing a pair of gaskets within the grooves.

Claim 27 replaces claims 1 to 3 and is directed to a test plug comprising "a pipe section having a chamber with an annular seat ... a plug installed in said chamber with an underside of said plug resting on said seat ...". Sollesnes does

not describe or teach such a structure. For example, as shown in Fig. 3 of Sollesnes, the plug 40 does not rest on any annular seat of the liner-section 41.

Claim 27 further requires the plug to include "a plurality of disc-shaped glass elements ... and a plurality of layers of a material other than glass ... between a pair of said glass elements". Neither Sollesnes nor Owens describes or teaches such a structure. As noted above, the plug 40 of Sollesnes is of a single solitary structure. In Owens, the plug 16 has a core 30 with sections 32 made of dissolvable metal. (See column 2, lines 46 to 50). A sheet 26 protects the core material 30 from premature dissolution caused by contact with fluid 18. (See column 2, lines 55 to 56).

There is no teaching in Owens that would lead one of ordinary skill in the art to modify the glass plug 40 of Sollesnes into a plurality of glass elements with layers of a material other than glass therebetween.

In view of the above, claim 27 is believed to be allowable over the references of record pursuant to the provisions of 35 U.S.C. 102 and 103.

Applicant's claimed structure provides a stronger plug by using a series of layers of glass, such that the glass can withstand several load changes and varying load changes than previously known plugs. (See Page 4, lines 26 to 31). Further, by using a multiplicity of glass plates, one type can be provided to insure hydraulic sealing against a liquid or gas and pressure while another type is provided to take up the load which arises as a result of the pressure against the glass area. (See Page 4, lines 33 to 36).

Claims 28 to 40 depend from claim 27 and are believed to be allowable for similar reasons.

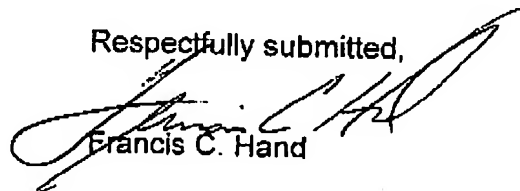
Claim 41 is directed to an embodiment wherein the glass elements are "in glued together relation to each other" rather than having layers of a different material than glass therebetween. In addition, claim 41 is directed to a pipe section having "an enlarged section defining a chamber with an annular seat at a bottom of said chamber" and with a plug "with a slanted underside ... resting on said seat". Neither Sollesnes nor Owens describes or teaches such a structure.

Claim 42 is directed to a pipe section comprising "an enlarged section defining a chamber with an annular seat ... for receiving a plug thereon; and an annular shoulder below said enlarged section for receiving an annular device thereon after removal of a plug from an annular seat". Neither Sollesnes nor Owens describes or teaches such a structure. Likewise, none of the remaining references of record describes or teaches such a structure.

Claim 43 depends from Claim 42 and is believed to be allowable for similar reasons.

The application is believed to be in condition for allowance and such is respectfully requested.

Respectfully submitted,



Francis C. Hand

#344963